

The Perils of Restructuring the Tech Landscape

By Krisztina Pusok and Edward Longe

Technlash

Despite the myriad of socioeconomic benefits that tech firms continue to provide, some lawmakers and scholars are voicing concerns about alleged ills and have used these concerns to justify the urgent need to restructure the tech landscape.¹

In June 2020, when COVID-19 was spreading across the country, the *Wall Street Journal* warned the tech sector would not be likely to catch a break from criticism:

"No matter the widespread societal benefits of technologies – having kept economies and societies going during the biggest shock the world has experienced since WWII – the technlash is likely to continue as a reflexive tendency to fear and oppose new technology."²

This report, the first in the series, seeks to discuss the validity of these criticisms by bringing forth the economic and empirical evidence, often neglected and omitted by the political rhetoric.

¹ "How big tech is giving back to society," PwC, May 6, 2019, <https://www.pwc.com.au/digitalpulse/tech-philanthropy-industry-giving-back-society.html>; Tarun Khanna, "When Technology Gets Ahead of Society," *Harvard Business Review*, 96:4, 2018, pp. 86-95.

Tech's Role During the Pandemic and Beyond

As the nation moved into lockdowns, the COVID-19 pandemic provided another example of technology's benefits.

Throughout the pandemic, tech companies ensured that Americans could continue working, socializing, shopping, seeing their doctor, and learning no matter where they resided. Online programs meant Americans across the country could continue exercising from the safety of their homes while gyms and recreation centers were closed. In addition, contact tracing apps were available to notify individuals of potential exposure.

As states locked down schools and business offices, teleconferencing services permitted remote learning, telework, and even church services. During this time, Microsoft Teams saw its users grow 26% by October 2020, and Zoom recorded over 350 million meeting participants in December 2020 -- all joined by a host of big competitors, including Google Meet, Verizon's BlueJeans, Cisco's WebEx, and RingCentral, LogMein's GoToMeeting, and Amazon's

² Irving Wladawsky-Berger, "Why the 'Technlash' is a Threat to Growth and Progress," *Wall Street Journal*, June 6, 2020, <https://www.wsj.com/articles/why-the-technlash-is-a-threat-to-growth-and-progress-01591464654>.

Chime.³ To summarize, these companies ensured that employees could work remotely, people could socialize virtually, and students could learn online. Without these benefits, the COVID pandemic would have been far more disruptive to the economy and the lives of Americans.

Although e-commerce made it possible for consumers to buy and pick up groceries without ever needing to leave their homes, the pandemic placed a substantial strain on America's supply chain, which resulted in empty grocery shelves and a shortage of personal protective equipment. Recognizing the supply chain issues faced by traditional stores, Amazon reached consumers' doors through its highly specialized logistics network. The company was also able to hire thousands of additional workers who had lost their jobs or furloughed in the pandemic's early days.

Luddism Lives

Fast forward to 2022, "techlash" is only intensifying, creating an environment in

which policymakers and the media attack tech companies without any serious scrutiny.⁴ Techlash, the expressed animosity towards technological innovations, is not new. Periodic panics about the impact of technology have been happening since the Industrial Revolution, and now we see it manifesting as a widespread hostile regulatory and legislative force in the U.S., Europe, and other parts of the world.⁵ It often takes the form of active support for policies (e.g., antitrust law and enforcement reforms) that reject progress and inhibit technological innovations.

Despite having the opportunity to reverse the tide of tech vilification from the Trump administration, President Biden pushed an agenda that echoed the techlash already voiced in Congress.⁶ He not only embraced the growing animus against tech companies but has issued an Executive Order,⁷ touting the need to reform America's competition laws.

The executive order, which includes 72 actions and recommendations that involve more than a dozen federal agencies,

³ Tom Warren, "Microsoft Teams Usage Jumps to 145 Million Daily Active Users," *The Verge*, April 27, 2021, <https://www.theverge.com/2021/4/27/22406472/microsoft-teams-145-million-daily-active-users-stats>; and "As the World Reopens, Can Zoom Maintain Its Hold on Face-to-Face Meetings?" *Fortune*, December 7, 2021, <https://fortune.com/2021/12/07/zoom-users-during-covid-pandemic-online-meetings/>.

⁴ Daniel Castro, "The Techlash Has Made It So Big Tech Can Do No Right," Information Technology and Innovation Foundation, August 8, 2021, <https://itif.org/publications/2021/08/08/techlash-has-made-it-so-big-tech-can-do-no-right>.

⁵ Robert D. Atkinson, D. Brake, D. Castro, C. Cunliff, J. Kennedy, M. McLaughlin, and J. New, "A

Policymaker's Guide to the *Techlash*—What it is and Why it's a Threat to Growth and Progress," *Information Technology and Innovation Foundation*, 2019.

⁶ Krisztina Pusok and Edward Longe, "Antitrust Explainer," American Consumer Institute, June 14, 2021, <https://www.theamericanconsumer.org/2021/06/antitrust-explainer/>.

⁷ "Executive Order on Promoting Competition in the American Economy," The White House, July 9, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/09/fact-sheet-executive-order-on-promoting-competition-in-the-american-economy/>.

explicitly outlines reform in competition policy for the tech, labor, agriculture, transportation, and healthcare sectors. The administration's justification for the tech focus was the significant number of social-economic problems created by tech companies, leading to decreased employment, lower wages, and reduced innovation.

Republicans and Democrats use techlash rhetoric to drive their political agendas in Congress.⁸ Democrats argue that the firms exercise excessive political and market power, harm small businesses and workers, threaten privacy, spread misinformation, and exacerbate wealth inequality. Republicans, on the other hand, contend that tech firms are biased against conservatives and censor speech. However, both sides agree that lawmakers need "to do something about it."⁹

While ongoing scrutiny on market competitiveness designed to enhance consumer welfare and innovation may prove beneficial, policies that embrace techlash without serious analysis of the validity of criticism come with significant risks. Economic efficiency that works to better consumer welfare and innovation could be replaced by incoherent sociopolitical goals that reject economic arguments. The

consequences are costly: slower economic growth, less consumer choice, and diminished consumer welfare.

Inextricable Link to Consumer Benefits

Today, tech has led to significant consumer benefits in education, healthcare, and productivity for consumers and businesses. For example, a smartphone gives users access to many applications, often for free, such as GPS, maps, search, video calling, and access to entertainment and news.

An iPhone 6 is 100 million times more powerful than the Command Module Computer that took the astronauts to the moon.¹⁰ Fifty years ago, a 3-minute toll call within the state of Maine would cost consumers more than a dollar (in current dollars), but a half-hour video call to Berlin is free today using WhatsApp. Last year, 340 million P.C.s were shipped around the globe,¹¹ though the first IBM home computer was introduced just over thirty years ago, before the founding of Google, Amazon, and Facebook.

Our reliance on technology deepened during the pandemic, shedding light on the importance of tech to the economy and

⁸ Dan Mogin, "Politics in Antitrust: This Time It's Different," *National Review*, April 27, 2021, <https://www.natlawreview.com/article/politics-antitrust-time-it-s-different>.

⁹ Margaret Harding McGill and Ashley Gold, "Tech Antitrust Bills' Make or Break Moment," *Axios*, January 10, 2022, <https://www.axios.com/antitrust-bills-make-or-break-big-tech-6b1451bb-a66a-4204-b23d-f2640c18a9fd.html>.

¹⁰ Tibi Puiu, "Your Smartphone is Millions of Times More Powerful Than the Apollo 11 Guidance

Computers," *ZME Science*, May 13, 2021, <https://www.zmescience.com/science/news-science/smartphone-power-compared-to-apollo-432/>.

¹¹ "Gartner Says Worldwide PC Shipments Declined 5% in Fourth Quarter of 2021 but Grew Nearly 10% for the Year," *Gartner*, January 12, 2022, <https://www.gartner.com/en/newsroom/press-releases/2022-01-12-gartner-says-worldwide-pc-shipments-declined-5-percent-in-fourth-quarter-of-2021-but-grew-nearly-10-percent-for-the-year>.

society. Yet, while there is no doubt that we live in a tech-saturated world, consumers and policymakers are still undecided over whether technology solves problems and makes our lives easier or if it instead introduces more complexity to our lives and generates a slew of other harms. Otherwise, in the words of Brad Smith, Microsoft's president, "is technology a tool or a weapon?"¹²

The scope of the report series is to shed light on an overly publicized and politicized debate: is the need to restructure the tech landscape justified? What are the economic and consumer benefits overlooked by the growing techlash attitude? Furthermore, what are the economic and consumer risks policymakers are willing to put at stake by restructuring the tech landscape?

Tech's Economic Impact

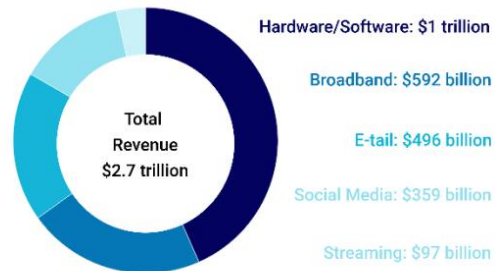
Looking at the largest U.S technology companies, a preliminary analysis of total sales shows the relative importance in various industries (see Figure 1).¹³ Moreover, the chart shows the dispersion of market power across the biggest of tech firms, indicating that bigness is not

¹² Brad Smith, *Tools and Weapons*, Penguin Press, New York, 2019.

¹³ The current data sample consists of the 36 of the largest U.S. technology companies in the Fortune 500 (categorized by their industry), as well as 10 notable fast growing tech companies in cloud, semiconductors and other sectors. The tech companies included in the sample are Meta Platforms, Alphabet, Twitter, Pinterest, AT&T, Verizon, Frontier, T-Mobile, U.S. Cellular, Comcast, Charter, Altice, Cable One, DISH, HP Enterprises, Rackspace, VMware, Salesforce, Cloud, Cognizant,

necessarily a curse, as some might contend.¹⁴

Figure 1: Total Annual Revenue by Tech Sectors



Source: Annual reports.

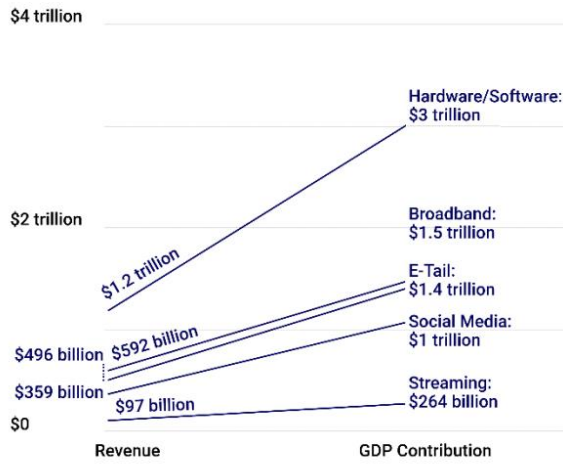
Additionally, companies in the tech sector make considerable investments in upgrading the infrastructure, property, equipment, and tech, accounting for hundreds of billions of dollars each year.

Yet, for a growing number of antitrust reformers, bigness seems to be the *raison d'être* for social problems ranging from unemployment to income inequality and the deterioration of democracy. With a focus on Facebook (now Meta), Amazon, Google, Apple, and Microsoft, critics of Big Tech assert that it has grown too large and powerful, and hence there is an urgent need to restructure the tech landscape.

Disney, Netflix, Fubo, Amazon, eBay, Etsy, PayPal, Intel, Broadcom, Micron, Qualcomm, Texas Instrument, Applied Materials, NVIDIA, Analog Devices, Lam Research, Dell, IBM, Corning, Cisco, HP H.P. Inc., Microsoft, Apple, Oracle, Adobe, Fiserv, Fortive; Future in-depth analyses will be expanded to data that reflects updates and trends in market data, as well as improving the representative balance between sectors.

¹⁴ Tim Wu, "The Curse of Bigness," Antitrust in the New Gilded Age, Columbia Global Reports, 2018.

Figure 2: Tech Sector Contributions to GDP



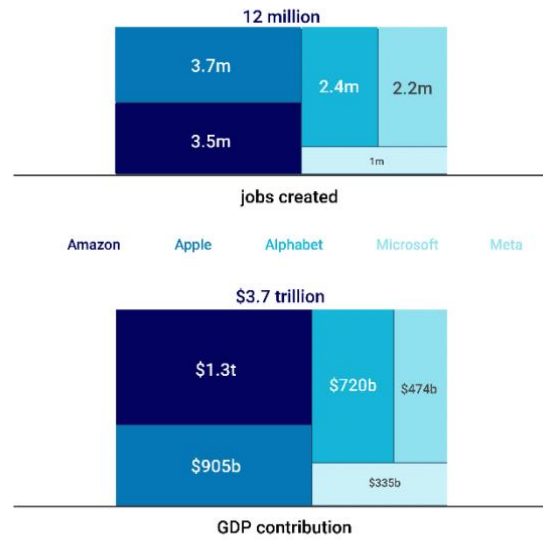
Source: Annual reports.

Our preliminary analysis shows the immense benefits that Big Tech contributes to the overall economy.

Specifically, as Figure 2 suggests, the total global economy receives nearly three dollars in economic benefits for every dollar in sales from tech companies in the U.S.¹⁵ In terms of total impact, five of these tech firms have led to the creation of 12 million direct and indirect jobs and an economic impact equaling 16% of economic output, if compared to the U.S. Gross Domestic Product (GDP) (see Figure 3).

¹⁵ To estimate the economic contribution, this brief uses the latest Regional Input-Output Modeling System (RIMS II) Type 2 multipliers from the Bureau of Economic Analysis. For more information, see www.bea.gov.

Figure 3: Big Tech Economic Contributions



Source: ACI estimations.

Tech companies also provide substantial benefits to small businesses, enabling them to reach more consumers and generate more revenue. For example, Amazon's online marketplace has more than 500,000 third-party sellers in the United States that sell over 3.8 billion products each year. Amazon also notes that its third-party sellers average \$200,000 in sales each year.¹⁶ These impressive statistics are only possible because Amazon enables third-party sellers to access millions of Americans with active Amazon accounts.

Similarly, Apple's app store and Google's Play store enable small developers the opportunity to reach millions of consumers who own Apple or Android devices.

¹⁶ "2021 Amazon Small Business Empowerment Report," Amazon, <https://assets.aboutamazon.com/9b/84/05cb2fc14da18e4574a5132f675a/amazon-smb-report-2021.pdf>.

The estimates provided here are conservative, considering they are based on a limited sample. However, the analysis shows the significant and positive economic impact that tech has on boosting economic growth, which leads to job creation and ultimately benefits consumers.

Unfortunately, policymakers often underplay this evidence. One thing is clear – putting these economic benefits on the legislative chopping block will have dire consequences on GDP, jobs, and investments.

The economic contributions of these five companies far surpass their revenues.

While the economic benefits appear impressive, they do not show the complete picture of how consumers benefit from the products and services offered by the tech sector. Further analysis in this report series will look at the cost of losing these benefits due to the imposition of rules and laws that ban self-preferencing, restrict mergers and acquisitions, and seek to break up companies.

Policy Implications

Proposals to make market capitalization the basis of antitrust enforcement decisions present a serious issue. Market capitalization refers to the value of a company on the stock market. It does not, for example, consider the harm caused to the welfare generated for consumers. Moreover, making market

capitalization the primary criterion for antitrust enforcement explicitly punishes growth and will likely disincentivize companies from growing, bringing new products to market, and employing more people.

Perhaps the most concerning element of making market capitalization the basis for antitrust enforcement is that it allows lawmakers to exempt certain companies from compliance. For example, highly valuable tech companies like Amazon and Microsoft can be targeted by lawmakers, while other companies can be exempted even if they are as big or bigger by other definitions. This system of picking winners and losers creates an unequal regulatory environment that will undoubtedly affect consumers and the innovation landscape.

Attempts to rewrite antitrust laws also ignore the substantial competition among tech companies and tech sectors, with new firms regularly challenging dominant incumbents. In the early years of social media, Myspace was the dominant platform with 22 million users and a valuation of \$12 billion. By 2011, however, Facebook had disrupted Myspace's dominance with over 687 million users worldwide.¹⁷ Today, a similar dynamic is building up as TikTok, the Chinese video-sharing platform directly competes with Facebook in the social media sphere.

It is also clear that no tech company resembles a monopoly. Traditionally, a monopoly occurs when only one operator

¹⁷ Florian Zandt, “The Rise and Fall of Myspace” Statistica, November 12, 2021.

exists in a given marketplace or no close substitute. For example, in the e-commerce sector, Amazon faces competition from traditional brick and mortar stores such as Target and Walmart and boutique sellers on Etsy. Facebook must compete with Twitter, LinkedIn, TikTok, Reddit, and other smaller platforms for consumers' time on social media. In the world of mobile devices, Apple competes with Google and more established companies such as Nokia, Samsung, and Motorola. What is clear is that big tech companies face substantial competition from each other and previous and rising incumbents.

Techlash proponents also ignore the fact that tech companies often operate across multiple lines of business, providing consumers with more choices. For example, Google, a company widely known for its search engine, purchased Android to compete with Apple's mobile operating system, while Amazon released its own tablet range to challenge Apple's dominance. This competition across multiple lines of businesses shows that more than one company exists in any given sector and a monopoly does not, by definition, exist.

Next in This Report Series

The upcoming reports in this series will exclusively focus on analyzing the effects of specific legislative proposals on consumer welfare. For example, do the proposed legislative actions benefit or harm consumers? How much would the consumers benefit or lose, and what are the other non-monetary implications?

Unfortunately, many lawmakers seek to restructure the tech landscape without considering the extensive repercussions their interventionist actions would have on consumers and innovation.

Not surprisingly, several problems arise when the techlash transcends sentiments and gets translated into policies that reject economic principles and are myopic to the benefits technology offers. Those are the uncharted and dangerous waters that some are willing to explore, and this report series seeks to address.

The Lost Economy is a research project sponsored by the American Consumer Institute, a nonprofit education and research organization. To learn more about the Institute or this report's authors, Krisztina Pusok and Edward Longe, visit www.TheAmericanConsumer.Org.